

Lieutenant Governor

### State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

June 28, 2016

Donald Clark, Ph.D. MCW Energy Group 18653 Ventura Boulevard, Suite 158 Tarzana, California 91356

Subject: Initial Review of Notice of Intention to Commence Large Mining Operations, MCW Energy

Group, TME Asphalt Ridge Mine, M/047/00089, Uintah, Utah

Dear Dr. Clark:

The Division of Oil, Gas and Mining has reviewed the referenced Notice of Intention to Commence Large Mining Operations (Notice) that was received on April 29, 2016. The attached comments will need to be addressed before tentative approval may be granted.

The comments are listed under the applicable Minerals Rule heading; please format your response in a similar fashion. Please address only those items requested in the attached technical review by sending replacement pages for the original Notice using redline and strikeout text. After the notice is determined technically complete, the Division will ask that you submit two clean copies of the complete Notice. Upon final approval, both copies will be stamped approved and one will be returned for your records.

Please submit your response to this review by September 9, 2016.

The Division will suspend further review of the Notice until receiving your response. The members of the review team are as follows: April Abate, permit lead, geology and hydrology; Mike Bradley, deleterious materials, biology; Peter Brinton, mining engineering; and Wayne Western, reclamation bonding. Once you have reviewed the comments, please contact the lead for this project, April Abate at 801-538-5214, to schedule a meeting to discuss the comments. Thank you for your cooperation in completing this permitting action.

Sincerely,

Paul B. Baker

Minerals Program Manager

PBB: aa: eb

Attachment: Review comments; Basic Information for Handling Hazardous Wastes

cc: Dan Hall DWQ (dhall@utah.gov)

Sam Arentz 7350 Island Queen Road Sparks, NV 89436

Jerry Mansfield. SITLA, jmansfield@utah.gov



Page 2 of 11 Donald Clark M/047/0089 June 28, 2016

## FIRST REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

#### MCW Energy Group TME Asphalt Ridge Mine

#### M/047/0089 June 27, 2016

**General Comments:** 

Comme nt #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
1	General	Please develop maps, figures and text with the understanding that they must be scanned to digital files and photocopied. This will require that hatching, line weights, colors, map labels, and text formatting should be clear and legible when digitally copied.	OGM	
2	General	Responses to the comments in this review may raise additional questions and generate subsequent comments by Division personnel. (This comment for Applicant/Operator understanding of the review process only; no specific response required.)	OGM	
3	General	Submittal should be formatted to easily incorporate additional revisions and amendments. (No specific response required.)	quier	
4	General	Please include page numbers throughout the document.	OGM	
5	General	Please use tab sheets for the appendices, maps & figures, and other sub-parts to the Notice.	OGM	
6	General	While developing reclamation cost estimates, the Division must assume the site will be left in a worst-case scenario with the Division having to conduct the reclamation with State-approved contractors in the absence of the operator. Please develop the reclamation cost estimate with this understanding.	OGM	
7	General	The reclamation cost estimate must take into account compliance with all applicable state and federal rules and regulations pertaining to worker and public health and safety, and the remediation, handling and disposal of regulated hazardous wastes. The Division is not exempt from complying with these statutes in the event it must undertake the reclamation. These rules include, but are not limited to: R307 (DEQ, Air Quality), R313 (DEQ, Waste Management and Radiation Control), R315 (DEQ, Waste Management), and R317 (DEQ, Water Quality).	OGM	
8	Section 107	Rules R647-4-107 and R647-4-111 are guidelines and requirements that should be used to develop the Operations Plan and Reclamation Plan for Sections 106 and 110 respectively. Write-ups for Sections 107 and 111 do not need to be included as part of the Notice as they would be repetitive. However, any requested variances from these, and other, guidelines and requirements should be addressed in Section 112.	OGM	
9	General	The Baseline Environmental Analysis conducted for the original TME Asphalt Ridge mine was completed on approximately 200 acres in Section 31 of Township 5 South, Range 22 East, by URS Group in 2008 (see Appendices 3& 4). This area only encompasses the current disturbed area.	aa	
		This proposed Notice revision by MCW Energy Group is requesting that a total of		

		960 acres be approved consisting of Pits 1, 2, 3, and 4 in Sections 31, 32 of Township 5 South, Range 22 East, and Section 25, Township 5 South, Range 21 East. In order for these areas to be considered in the review, expanded environmental baseline studies are necessary. Options are to either 1. scale back the requested permit area that falls under the 200 acres where baseline studies were conducted, or 2. provide additional baseline studies to cover all the areas being requested for permitting.  The permit, if approved, would only apply to the southwest quarter of Section 31, not the groups of lease areas depicted in Figure 1. None of the background studies done almost ten years ago speak to these additional parcels, including SITLA sections 35 and 36.	mb	
10	General	The Division cannot permit the additional external dump area outside of an authorized lease area. Until an authorized lease is acquired, please provide an alternative plan for the external dump area.	aa	

R647-4-104 - Operator Information and Surface and Mineral Ownership

Comme nt #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
11	R647-4- 104.9	Under Adjacent Landowners, the BLM address contact info should contain city, state and zip code information.	aa	

#### R647-4-105 - Maps, Drawings & Photographs

**General Map Comments** 

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
12	Figures 1 through 22	Maps are of insufficient scale to make determinations of surface impacts, most using only half of an 8.5x11 sheet. Many are also blurry and unreadable. Please provide larger maps on 11x17 sheets and at recommended standard engineering scales for clarity and ability to provide more information and detail.	mb	
		Ensure that topographic lines and labels are legible.  Please add north arrows to all figures.	pnb	
13	Figures 1 through 22	To minimize additional comments that will likely be generated from the Division's review of the future maps, ensure that information discussed in the maps sections of the rules (R647-4-105) is included on future maps. Contact the Division for clarity regarding what maps will and will not be required.	pnb	

#### 105.1 - Topographic base map, boundaries, pre-act disturbance

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
14	Figure 1	Please depict a clear representation of the permit boundary area as described in Section R647-4-104 of the Notice. Please depict streams, springs, the Green River, and any other applicable feature as required in R647-4-105.12	aa	

15	Figure 1	Please depict the access route to the permit area from the highway as required by R647-4-104-1.13.	aa
16	Figure 1	Please depict all existing mining disturbance areas on this figure (as opposed to a separate Figure 3).	aa
17	Figure 2	Please show the land ownership information on this map (as opposed to a separate Figure 4).	aa
18	Figure 2	Surface facility maps are to be provided at an approximate scale of 1" = 200'.	aa
19	Figure 2	Please use a standard scale, such as 1"=2000'.	aa & pbb
20	Figure 2	Please include a depiction of the processed sand and underlying clay liner staging area.	aa
21	Figure 5	The existing road into the mine is not shown on this map. Is the road into the facility in its current configuration to remain, or to be redesigned?	aa
22	Figure 6	The shape of Pit 2 used for the location of the surface facilities is different than the shape of the Pit 2 parcel on Figure 2. Please correct this discrepancy.	aa
23	Figure 6	All surface facilities storage tanks must be shown within secondary containment designed to hold a capacity of 110 percent of the volume of the contents of the tanks. Please show secondary containment designed to scale.	aa
24	Omission	None of the figures show where topsoil stockpiles will be located.	aa
25	Omission	All active mine pits are proposed with 1H:1V slopes. This needs to be shown on a figure in cross section for all active highwall areas.	aa
26	Omission	A hydrology map is needed to depict all the hydrologic features discussed in the Psomas plan referenced in Appendix 6. All hydrologic features should be included on active mine phase figures. Hydrologic features that will be permanent features at final reclamation also need to be shown on a figure.	aa
27	Omission	All reclaimed highwall slopes are proposed to be left at a 3H;1V. This needs to be shown on a figure in cross section for all reclaimed highwall areas.	aa

105.2 - Surface facilities map

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
28	Figures 6 through 20	Only one surface facility map per pit, showing the final approximate pit floor and highwall elevation contours, is needed. A note referencing concurrent pit backfill and the appropriate reclamation treatments map should be included.	pnb	
29	Figures 6 through 20	Unable to determine the percent grade steepness of highwalls during active mining and the steepness of slopes at final reclamation due to the lack of scale. Please provide an accurate scale.	aa	
30	Facilities Maps	Show the mine haul and access roads (including widths as meaningful), utilities, and other features identified in the rules.	pnb	
31	Current Figs. 5 through 16	Please locate on a detailed map or site plan all bulk fluid holding tanks or vessels, identify the fluid contained, and show volumes for these vessels. This would be best shown on a dedicated processing facility site plan.	mb	
32	Surface Facility Maps, Pit 3	In future versions of Pit 3 area maps, include the boundaries of the External Dump.	pnb	
33	Surface Facilities	Show the specific locations of topsoil storage areas and other mine features identified in the rules.	pnb	

parameter and the same of the	
Maps	
The state of the s	

105.3 - Drawings or Cross Sections (slopes, roads, pads, etc.)

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
34	Omission	For each pit, provide a cross-section of the pit highwall at its maximum height, consistent with the pit wall geometry described in the Overview section of 106.2. The location of the maximum highwall should be shown on a plan view of the pits (such as a Surface Facilities map).	pnb	
35		Assuming baseline analysis on the other lease areas are included in the revised permit, reclamation treatments map showing final backfill elevation contours (similar to Figure 10 but with more detail) are needed per pit. Notes should be included, referencing backfill and methods for highwall reduction in the case that an unknown amount of processed sand is able to be sold instead of being backfilled. Maps at 11x17 should be able to show those areas in enough detail.	pnb	
36	Omission	There is no reclamation treatment map showing where topsoil/plant growth media will be distributed and where reseeding will take place. Please provide a reclamation treatments map.	mb	

105.5 - Underground and Surface Mine Development Maps

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
37	Multiple Figures	Only a few maps showing surface mine development (e.g. one per pit area) are needed, and should include the mining progression information shown on Figure 2.	pnb	
38	Figures 5 through 16	Appendix 6 has an engineering plan for constructing stormwater conveyance and detention structures, but the mine development figures do not allow room for them to be installed. Please account for the installation of the stormwater management facilities in the mine plan.	mb	
		Identify hydrology information on operation and reclamation maps, or on separate hydrology maps for each area if their addition would be difficult to see.	pnb	

#### R647-4-106 - Operation Plan

### 106.2 - Type of operations - mining method, onsite processing, deleterious or acid-forming materials

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
39	Overview, para 2 & Other	The maximum depth varies pit to pit, and the maximum depth of 200 feet reported here is inconsistent with the maximum depth of between 240 and 260 feet suggested on Figure 9 for Pit 1. Check the other pits to identify maximum pit depths, and correct as needed.	pnb	
40	Overview, para 2	If the pit slope geometry description is understood correctly, it appears that the overall slope angle of the highwall will be significantly less than 45 degrees. Provide a maximum planned overall pit slope.	pnb	

41	Overview	Identify the anticipated maximum heights of the external dumps.	pnb
42	Deleterious Materials	Discuss the source of the existing acidity in the stream, and indicate whether the acidity source will be present as a deleterious material as a result of the mine operation.	pnb
43	materials	By definition, deleterious materials include geologic materials resulting from mining activity as well as hazardous substances introduced on site to support the operation. Introduced materials include fuels, lubricants and fluids for vehicles and equipment, processing reagents, PCB-containing transformers, CFC-containing cooling units, and regulated hazardous building materials such as asbestos, lead-based paint and "universal hazardous wastes" as defined in UCA R315-273, (Standards for Universal Waste Management). Please identify and quantify all fuels, lubricants, fluids, processing reagents, and any other regulated materials to be used and/or stored in regulated quantities on site.	mb
44	Deleterious materials	Information published by MCW says, and analytical results provided indicate, that a constituent of the solvent includes polycyclic hydrocarbons, (polycyclic aromatic hydrocarbons (PAH's)). The solvent to be used is described as part of a "proprietary process." The Division must know and understand the chemicals used in the solvent in order to determine potential health, safety and environmental affects, and reclamation liabilities associated with removing and disposing of these materials, or remediating any kind of regulated spill or other introduction into the environment. Please provide this information to the Division. The ratio of the chemicals used in the solvent mixture is not necessary, but would be useful to the evaluation. This information may be provided under separate cover and prominently stamped "Confidential".	mb
45	Deleterious materials	Table 7 in Appendix 2, the Monitoring and Sampling Plan, shows that the processed sands had 4,750 mg/kg of Diesel Range Organics, which is close to the 5,000mg/kg Tier 1 screening levels, and indicates that exceeding that level during operation is within the realm of probability. Please include in Appendix 2 a sampling and monitoring plan for the processed sands before they are placed in the designated disposal area. Sampling and analysis of processed sands should be conducted during run-of-mill operations on a routine basis. Sampling frequency must be adequate to monitor the processed sands as they are being stored on the surface or before being placed as backfill in mined out pits. Sampling and monitoring reports should be submitted to the Division annually.	mb
46	External Dumps	This section of the Notice does not specify that surface soils (aka topsoil, or overburden/interburden and subgrade ore) will each be segregated into separate piles. Topsoil must be segregated for concurrent/final reclamation activities. Please clarify.	aa
47	External Dumps	The various stockpiles and their respective estimated volumes should be segregated	aa
48	Processed	and each depicted on the appropriate maps.  Appendix 1 discusses the overview of the technology utilized to liberate bitumen	aa
	Sand	from the sands. According to the document, the lighter hydrocarbons and alcohols that make up the solvent are reported to have a propensity to produce Light Aqueous Phase Liquid or LNAPL, a petroleum compound less dense than water and thus floats on the surface of water. In order to ensure that returning the processed sands to the mine pits as backfill will not create a potential accumulation of LNAPL in the form of stormwater runoff, or the potential to form from water infiltration into the process sands, the staging area should have a more robust containment in addition to the compacted clay and asphalt holding pads proposed in the Notice. The Division	

Page 7 of 11 Donald Clark M/047/0089 June 28, 2016

would like to see a containment area designed around the processed sands stockpile with water catchment sumps. The sumps would need to be closely monitored to determine if the processed sands mixed with stormwater would have a propensity to
create LNAPL. The Division would require this as an interim measure prior to authorizing backfilling the pits with the processed sands. This interim measure and
monitoring period would be considered necessary until data can demonstrate that there would be minimal environmental risk associated with permanently disposing
of the processed sands in the mine pits at reclamation. Please provide a design plan, or possibly a leachate study, for monitoring LNAPL on the processed sand stockpile.

106.4 - Nature of materials mined or processed (including waste materials), and estimated

annual tonnages

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
49	Omission	Native pyrite-bearing rock has been identified as a likely source of acidity in the stream. Discuss geochemical characteristics of mined waste rock (overburden and interburden), ore, processed ore (tails), and other mined or processed materials. Refer to pertinent sections of Appendix 2, which includes some analysis results. Contact the Division for more information about what type of analyses would be appropriate to characterize mined materials. Chemical analyses—such as elemental, acid-base, and SPLP analyses—may be needed.	pnb	
50	Table 3	Please define the unit BCY, assumed to be bank cubic yards.	aa	
51	Table 3	The table should also provide information on processed sand volumes.	aa	

106.6 - Plan for protecting & re-depositing soils

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
52	Omission	Please show topsoil/plant growth media stockpile location(s) on a map.	mb	
53	Omission	For material balance purposes, identify the average depth of soil recovered and the disturbed acres from which soil is recovered.	pnb	

106.8 - Depth to groundwater, extent of overburden, geologic setting

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
54	Omission	There should be a more comprehensive attempt to discuss the origin of the groundwater that originates upgradient of the project area that form the headwaters of the perennial stream that runs through the existing permit area. According to the point-to-point water rights on the stream, the creek is known as Devil's Cave Draw. For example, what formation do the springs originate from? Water quality samples should be collected from this upgradient area, the active project area, and downgradient of the mine for baseline purposes throughout the life of the project and for a post-mining monitoring period that would follow. This will provide baseline information and show whether—or not—the stream is affected by the mining operation.	aa	
55	Omission	Please add the identification number for the well drilled in October 2015 to Figure 21 and include the well log as an Appendix.	aa	

Page 8 of 11 Donald Clark M/047/0089 June 28, 2016

56	Omission	Water wet saturated intervals were reported at given depth intervals in the various wells that were historically tested. Please review available well logs to determine if there is a correlation between these wet intervals and a specific geologic formation. For example, if the water wet intervals appear in a sandstone unit of the Duchesne River formation, then a connection can be made as to where water may be likely encountered.	aa	
57	Omission	Please indicate the direction of strike and dip in the geologic setting section of the text.	aa	

106.9 - Location & size of ore and waste piles, tailings, ponds

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
58	Omission	Identify the size (height, acreage, and maximum planned volume of storage) for the three waste dumps for overburden, interburden, and possibly early processed sands.	pnb	
59			aa	
60	Table 5	The Notice needs to include analytical results from a sample collected within the current disturbance boundary, or from a sample from downgradient of the disturbance boundary.	aa	

R647-4-109 - Impact Assessment
109.1 - Projected impacts to surface & groundwater systems

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
61	to Army Corps of Engineers (ACOE) standards that identifies wetlands in the project area. The site map indicates that these wetlands could be impacted with dump fill material. In consultation with the Army Corps of Engineers, it was learned that no delineation is in their records for this site. If these wetlands will be impacted by any type of fill, the delineation must be submitted to the Corps and Corps verification obtained prior to obtaining a permit from the Corps to impact these wetlands.		mb	
62	Appendix 5 is a seep and spring study conducted internally by the company, and concludes that there are no springs that will be impacted by the operation. However, in section 4.2 of the Phase I ESA in Appendix 3, it states that "several springs were present, particularly in Parcel 8." Parcel 8 is where Pit 1 and the processing plant are located. Please explain this contradiction in findings.		mb	
63	Appendix 6	Appendix. 6 shows engineered stormwater management facilities only for Parcels 8, 2 and 10. Similar designs will be required for Parcels 1 through 7, and any other ands to be proposed before surface disturbance can be permitted on them.		
64	109.1	A broader discussion of the regional groundwater is needed. For example, aside from the confirmation that no groundwater was found within the first 400 feet of the existing mine footprint, additional discussion is needed regarding the source of the groundwater spring located upgradient of the mine that serve as the headwaters of the perennial stream. (Similar comment to 106.8)		
65	109.1	A more detailed design plan is needed for the berm designed to protect the perennial stream from any potential spills or releases to the environment.	aa	

109.2 - Potential impacts to threatened & endangered wildlife/habitat

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review
66	review located approximately 2.25 miles from a sage grouse lek, while Parcel 8 is located approximately 3.3 miles from it. The west edge of Section 35 is less than 1.2 miles from the lek. The lek in question is not in a SGMA.  Parcel 7 is approximately 4.85 miles from a SGMA. Other lease parcels will be evaluated if and when they are permitted. This project has no direct impacts to SGMA's or SGMA leks. No response required.		mb	
67	OGM review	OGM The permit area does not impact any Graham's Penstemon Conservation Agreement		
68	Appendix 3	The Threatened & Endangered Species report included in Appendix 3 identifies habitat for the Uinta Basin hookless cactus, federally listed as a threatened species, in the "extreme southeast section of the project," presumably Parcel 10. The mine development figures provided show a dump occupying the entire south half of Parcel 10. Since this report is over eight years old, please have this habitat area delineated, mapped, and ground surveyed by a qualified consultant to determine if any Uinta Basin hookless cacti are present, and if so, redesign the mine plan to avoid impacts, or provide a mitigation plan for any impacts.	Mb	
		Please provide an updated Threatened and Endangered species list. The Fish and Wildlife service recommends frequently checking their databases to evaluate the most up-to-date information.	aa	

109.3 - Projected impacts on existing soils resources

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
69	Omission	Please describe the depths and volumes of topsoil to be salvaged for reclamation.  Please describe to some degree the projected impacts to these soils and measures to be taken to protect them during storage prior to redistribution during reclamation.  (Move statement on soil protection measures from 110.5 to this section.)	mb	

109.4 - Projected impacts on slope stability, erosion control, air quality, public health and safety

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
70	Omission	Address what emissions of solvent and petroleum vapors will be coming from non-point sources such as the processed sands dump prior to capping.	mb	
71	Omission	Please provide a draft Fugitive Dust Control Plan as part of this Notice for review.	mb	

#### R647-4-110 - Reclamation Plan

# 110.2 – Reclamation of roads, highwalls, slopes, impoundments, drainages, pits, piles, shafts, adits, etc

Comment # Sheet/Page/ Map/Table #	Comments	Initials	Review Action
--------------------------------------	----------	----------	------------------

Page 10 of 11 Donald Clark M/047/0089 June 28, 2016

72	Pits & Highwall Reclamation	If no highwalls are to remain at closure, and assuming waste, spoil, and/or fill material remains in its place, these materials will need to be graded to a stable configuration and need be sloped to minimize safety hazards and erosion while providing for successful revegetation. Provide additional information and explanation for highwall removal in case significant process sands will be sold, consistent with R647-4-111.6. Be aware that angle-of-repose slopes do not fit this description.	pnb	
73	Pits and Highwall Reclamation	Similar to the above comment, the plan notes that the final grade may be different if significant amounts of asphalt are sold. If that is the case, you will need to provide an alternative reclamation plan with new slope contours to account for the lower volume of material being used at final reclamation.	aa	

110.3 - Facilities to be left for post mining use (buildings, utilities, roads, pads, ponds, pits, equipment, etc.)

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
74	OGM Review	The hydrologic study prepared in 2008 was designed for the original mine footprint. If the operator opts to permit all the lease areas as discussed in comment #9, then hydrologic design calculations will also need to be updated for all mining disturbance areas associated with each of the leases permitted.	aa	

110.4 - Description or treatment/location/disposition of deleterious or acid forming materials, including map

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
75	Omission	Soils contaminated with regulated hazardous materials must be remediated prior to, or during, reclamation. Remediation methods will be dependent on the nature of the contaminating materials. Please describe proposed clean-up measures to be used in the event of a spill of fuels, oils and/or processing reagents.	mb	
76	Omission	A pre-demolition asbestos survey of all buildings will be required prior to removal in compliance with R307-801-9. DEQ.	mb	

110.5 - Revegetation planting program

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
77	Omission	Describe the depths of topsoil/plant growth media placement on reclamation treatment areas. Please explore the possibility of using clean processed sands that could be blended with existing soil resources to increase the amount of available plant growth media. The sands would need to pass DEQ clean-up levels. A test plot is recommended to determine the viability of such an option.	mb	
78	Table 7	Please add 0.1 pounds per acre PLS of Wyoming Big Sagebrush (Artemisia tridentata ssp. wyomingensis) to the seed mix.	mb	
79	110.5	Stormwater conveyances and basins must be regraded and successfully revegetated prior to final bond release.	mb	

#### R647-4-113 - Surety

Page 11 of 11 Donald Clark M/047/0089 June 28, 2016

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
80	Cash Surety Only	If applicable: All operators that want to provide a cash surety must also provide an accurately completed <b>IRS Form W-9</b> with their cash deposit. A <b>W-8</b> form will be required if the company is based outside the US. The bank where the State Treasurer will deposit the cash must approve and accept the form prior to the Division granting final approval of the permit.	OGM	
	Appendix 8, Earthwork	Final pit highwall reduction and backfill slope grading should be included in the reclamation cost estimate.	pnb	
81	Appx. 8, Item 2	Include costs for conducting a required pre-demolition building inspection to identify any asbestos-containing building materials as required in UAC R307-801-9. Any EPA- and Utah-regulated hazardous wastes must also be removed and disposed of in accordance with R315 (Waste Management). The Division requests adding a 10 percent contingency to the total demolition costs provided for each building for the inspection, abatement and disposal of any regulated hazardous materials.	mb	
82	Appx.8	The bond calculations in Appendix 8 were from 2008. The bond calculations in the currently approved plan are from 2014. Please use the Division's bonding format and current unit costs.	whw	